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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/684,113	10/10/2003	Vijay R. Mhetar	135546-1	2761
23413	7590	06/08/2006	EXAMINER	
CANTOR COLBURN, LLP 55 GRIFFIN ROAD SOUTH BLOOMFIELD, CT 06002			YOON, TAE H	
			ART UNIT	PAPER NUMBER
			1714	

DATE MAILED: 06/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/684,113

Applicant(s)

MHETAR, VIJAY R.

Examiner

Tae H. Yoon

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 May 2006.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 and 14-21 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-12, 14 and 16-21 is/are rejected.
7) ☒ Claim(s) 15 is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 5 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The recited "derivatives thereof" in claim 5 is indefinite absent particular functional groups or substituents, and applicant failed to traverse the rejection. Section [0012] of the specification teaches that the derivatives thereof are esters, and the instant claims recites acid esters as well as derivatives thereof. Thus, it is unclear what encompasses said derivatives thereof other than acid esters.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

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A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-6, 8, 12, 14 and 19 are provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-47 of copending Application No. 10/678,471 (US 2005/0075426) and 10/947,265 (US 2005/0075426 A1). Although the conflicting claims are not identical, they are not patentably distinct from each other because the functionalized PPE resin and amounts thereof of said patent encompasses the instant ester capping end groups and amounts and since the instantly recited "comprising" permits the presence of an acryloyl monomer of said copending Application. Note that the impact modifier in claim 1 is an optional component when a flame retardant is used.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the

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applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-5, 9 and 14 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Braat et al (US 6,306,978).

Rejection is maintained for reason of record with following response.

Contrary to applicant's assertion, the rubber modified polystyrene taught by Braat et al meets the instant impact modifier.

Claims 1-9, 12, 14 and 19-21 are rejected under 35 U.S.C. 103(a) as obvious over Braat et al (US 6,306,978) in view of Geprags et al (US 2003/0130403 A1).

Rejection is maintained for reason of record with following response.

Geprags et al is recited to show other known additives, not PPE in amount over 15 wt.%. Braat et al further teach employing at least one polystyrene at col. 6, lines 19-20, and thus the utilization of polystyrene and rubber modified polystyrene would be obvious since said at least one polystyrene encompasses one or more polystyrene.

Claims 1-6, 8-10, 12, 14 and 19-21 are rejected under 35 U.S.C. 103(a) as obvious over Braat et al (US 6,306,978) in view of Campbell et al (US 2005/0075426 A1).

The instant invention further recites anti-oxidant, glass fiber and flame retardant over Braat et al. However, the use of such components in PPE composition to improve light stability, mechanical properties and fire-resistance is a routine practice in the art as taught by Campbell et al, abstract, [0047], [0058] and [0063].

It would have been obvious to one skilled in the art at the time of invention to utilize the art well known additive such as anti-oxidant, glass fiber and flame retardant of Campbell et al in Braat et al since the use of such components in PPE composition to improve light stability, mechanical properties and fire-resistance is a routine practice in the art.

Claims 1-5, 8, 12, 14 and 16-19 are rejected under 35 U.S.C. 103(a) as obvious over White et al (US 4,760,118) in view of Campbell et al (US 2005/0075426 A1).

White et al teach a PPE capped with salicyclic acid esters or anthranilic acid obtained by melt at col. 5, lines 9-38. The intrinsic viscosity taught at col. 5, lines 23-25 also.

The instant invention further recites glass fiber and flame retardant and adding a capping agent at downstream over White et al. However, the use of such components in PPE composition to improve mechanical properties and fire-resistance is a routine practice in the art as taught by Campbell et al, abstract, [0047], [0058] and [0063]. Also,

addition of a capping agent after sufficient melting of PPE at downstream in order to obtain a homogeneous capping reaction is considered an obvious modification to one skilled in the art.

It would have been obvious to one skilled in the art at the time of invention to utilize the art well known additive such as glass fiber and flame retardant of Campbell et al in White et al since the use of such components in PPE composition to improve light stability, mechanical properties and fire-resistance is a routine practice in the art, and to add a capping agent after melting of PPE in order to obtain a homogeneous capping reaction.

Claims 1-6, 8, 12, 14 and 19 are rejected under 35 U.S.C. 102(e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Campell et al (US 2005/0075426 A1).

Campbell et al teach flame retardant functionalized PPE resin in abstract, [0047], [0058, glass fibers] and [0063]. Ester capping agents are taught in [0021]-[0024]. The intrinsic viscosity and the use of at least 15 wt.% of said functionalized PPE resin is taught in [0034] and [0035]. Molding taught in examples meets the instant melt blending.

Thus, the instant invention lacks novelty.

Claims 1-6, 8, 11, 12, 14 and 19 are rejected under 35 U.S.C. 103(a) as obvious over Campell et al (US 2005/0075426 A1) and Braat et al (US 6,306,978).

The instant invention further recites employing a rubber modified polystyrene over Campell et al. But, Campell et al teach employing various additives such as toughening agents in [0063], and said toughening agents encompass impact modifiers such as rubber modified polystyrene of Braat et al.

It would have been obvious to one skilled in the art at the time of invention to utilize the art well known additive such as rubber modified polystyrene of Braat et al in Campell et al since the use of such components in PPE composition to improve mechanical properties such as toughening is a routine practice in the art.

Claim 15 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tae H. Yoon whose telephone number is (571) 272-1128. The examiner can normally be reached on Mon-Thu.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Tae H Yoon
Primary Examiner
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THY/June 6, 2006